# Prof. ZAFER BOZKUŞ

#### **Personal Information**

Office Phone: +90 312 210 5409

Email: bozkus@metu.edu.tr

Web: https://blog.metu.edu.tr/bozkus/

Address: ODTÜ İnşaat Mühendisliği Bölümü, K3-210, Hidrolik Lab. Dumlupınar Bulvarı, No.1, Çankaya-Ankara, 06800.

#### **International Researcher IDs**

ScholarID: kyBb6okAAAAJ ORCID: 0000-0001-6863-3531

Publons / Web Of Science ResearcherID: P-8997-2019

ScopusID: 6601990118
Yoksis Researcher ID: 23344

#### **Education Information**

Doctorate, Michigan State University, College of Engineering, Civil and Environmental Engineering, United States Of America 1986 - 1991

Postgraduate, Michigan State University, College of Engineering, Civil and Environmental Engineering, United States Of America 1983 - 1985

Undergraduate, Istanbul Technical University, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 1978 - 1982

# Foreign Languages

English, C1 Advanced

#### **Dissertations**

Doctorate, The Hydrodynamics of an Individiual Transient Slug in a Voided Line, Michigan State University, Civil And Environmental Engineering, 1991

Postgraduate, Unsteady Open Channel Flow and Dam-Break Problem, Michigan State University, Civil And Environmental Engineering, 1985

#### Research Areas

Civil Engineering, Hydraulic, Hydraulic Structures, Pipeline Hydraulics, Open Channel Flow, Hydromechanics, Bridge Hydraulics, Engineering and Technology

# **Academic Titles / Tasks**

Professor, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2013 - Continues Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2005 - 2013

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2000 - 2005

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 1997 - 1998

Lecturer PhD, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 1995 - 1997

# Academic and Administrative Experience

Hidrolik Laboratuvarı Yöneticisi, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2017 - Continues

Bölüm Başkan Danışmanı, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2018 - 2021

## **Advising Theses**

Bozkuş Z., Zamana bağlı bir akım sırasında bir hidroelektrik santralde basınç düşürücü vana ile türbinler arasındaki etkileşimin araştırılması, Postgraduate, M.ALİ(Student), 2022

BOZKUŞ Z., Numerical investigation of 2D dam-break failures by using GIS applications, Doctorate, A.ASHRAF(Student), 2021

Bozkuş Z., SOFTWARE DEVELOPMENT FOR ANALYZING FLUID TRANSIENTS IN PIPELINES, Postgraduate, S,HABİBİ(Student), 2020

Bozkuş Z., TWO-DIMENSIONAL DAM BREAK ANALYSES OF BERDAN DAM, Postgraduate, Ç.IRMAK(Student), 2019 Bozkuş Z., 2-DIMENSIONAL FLOOD CONTROL SIMULATIONS FOR WAMI AND DÜDEN RIVERS, Postgraduate, U.CAN(Student), 2019

Bozkuş Z., Investigation of water hammer problems and potential solutions in pump discharge lines, Postgraduate, R.ÇAĞRI(Student), 2019

BOZKUŞ Z., Development of a computer code to analyse fluid transients in pressurized pipe systems, Postgraduate, H.DALGIÇ(Student), 2017

BOZKUŞ Z., Numerical investigation of free surface and pipe flow problems by smoothed particle hydrodynamics, Doctorate, A.ERSİN(Student), 2017

BOZKUŞ Z., Development of a computer aided engineering tool for pipe lines, Postgraduate, K.YÜCE(Student), 2016 BOZKUŞ Z., Comparison of linear, labyrinth and piano key weirs to increase the discharge capacity of existing spillways for a given head /, Postgraduate, D.KARAEREN(Student), 2014

BOZKUŞ Z., Numerical investigation of protection measures against water hammer in the Yesilvadi hydropower plant, Postgraduate, S.DURSUN(Student), 2013

BOZKUŞ Z., Investigation of waterhammer problems in the penstocks of pumped-storage power plants, Postgraduate, A.ERSİN(Student), 2013

BOZKUŞ Z., Experimental investigation of local scour around bridge pier groups, Postgraduate, M.CAN(Student), 2013 BOZKUŞ Z., Numerical investigation of effective surge tank dimensions in hydropower plants under various hydraulic conditions, Postgraduate, P.BERBEROĞLU(Student), 2013

Bozkuş Z., Yanmaz A. M., Development of a Computer Software for Hydraulic Design of Small Hydropower Facility, Postgraduate, E.ALİMOĞLU(Student), 2012

BOZKUŞ Z., Investigation of waterhammer problems in Camlidere Dam-Ivedik Water Treatment Plant pipeline at various hydraulic conditions, Postgraduate, E.SAKABAŞ(Student), 2012

BOZKUŞ Z., Investigation of waterhammer problems in the penstocks of small hydropower plants, Postgraduate, M.ÇALAMAK(Student), 2010

BOZKUŞ Z., Prediction of the transient force subsequent to a liquid mass impact on an elbow of an initially voided line, Doctorate, B.ABBAS(Student), 2009

BOZKUŞ Z., Experimental investigation of tailwater effect on the energy dissipation through screens, Postgraduate,

V.ASLANKARA(Student), 2007

BOZKUŞ Z., Numerical simulations of unsteady flow in an oil pipeline under various hydraulic conditions., Postgraduate, E.TURAN(Student), 2006

BOZKUŞ Z., Experimental investigation of energy dissipation through triangular screens, Postgraduate,

E.GÜNGÖR(Student), 2005

BOZKUŞ Z., Numerical simulation of the Kirazlıköprü dam faulure on the Gökırmak river, Postgraduate,

K.KARAKAYA(Student), 2005

BOZKUŞ Z., Numerical simulation of the Çınarcık dam failure on the Orhaneli river, Postgraduate, F.BAĞ(Student), 2005 Bozkuş Z., Experimental investigation of local scour around inclined dual bridge piers, Postgraduate, M.ÇEŞME(Student), 2005

BOZKUŞ Z., Experimental investigation of energy dissipation through inclined screens, Postgraduate, G.BALKIŞ(Student), 2004

BOZKUŞ Z., Experimental investigation of energy dissipation through screens, Postgraduate, P.ÇAKIR(Student), 2003

BOZKUŞ Z., Experimental investigation of scouring around inclined bridge piers, Postgraduate, O.YILDIZ(Student), 2001

BOZKUŞ Z., Experimental and numerical analysis of transient liquid slug motion in a voided line, Postgraduate,

Ö.UĞRAŞ(Student), 1999

BOZKUŞ Z., TOKYAY N., Pre-event dam failure analyses for emergency management, Postgraduate, A.İHSAN(Student), 1998

Bozkuş Z., Altınbilek D. H., Comparison of physical and numerical dam-break simulations: a case study, Postgraduate, A.KASAP(Student), 1996

# Jury Memberships

Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, Orta Doğu Teknik Üniversitesi, November, 2023

Appointment to Academic Staff-Professorship, Appointment Academic Staff, Orta Doğu Teknik Üniversitesi, September, 2022

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Orta Doğu Teknik Üniversitesi, August, 2018

### **Designed Lessons**

Bozkus Z., Fluid Transients in Closed Conduits, Postgraduate, 2001 - 2002

### Published journal articles indexed by SCI, SSCI, and AHCI

I. Introducing a Newly Developed Computer Software to Analyze Fluid Transients in Pressurized Pipeline Systems

Uyanık M. C., BOZKUŞ Z.

Arabian Journal for Science and Engineering, vol.49, no.10, pp.13769-13785, 2024 (SCI-Expanded)

II. A novel CFD-ANN approach for plunger valve optimization: Cost-effective performance enhancement Kaak A. R. S., Çelebioğlu K., Bozkuş Z., Ulucak O., Aylı E.

Flow Measurement and Instrumentation, vol.97, 2024 (SCI-Expanded)

III. Developing empirical formulae for scour depth in front of inclined bridge piers Razvijanje empirijske jednadžbe za dubinu podlokavanja ispred nagnutih stupova mosta FEDAKAR H. İ., DİNÇER A. E., BOZKUŞ Z.

Gradjevinar, vol.75, no.3, pp.239-256, 2023 (SCI-Expanded)

IV. Three-dimensional CFD analysis of liquid slug acceleration and impact in a voided pipeline with end

orifice

He J., Hou Q., Lian J., Tijsseling A. S., Bozkuş Z., Laanearu J., Lin L.

Engineering Applications of Computational Fluid Mechanics, vol.16, no.1, pp.1444-1463, 2022 (SCI-Expanded)

V. Fully Coupled Smoothed Particle Hydrodynamics-Finite Element Method Approach for Fluid-Structure Interaction Problems With Large Deflections

Dincer A. E., Demir A., BOZKUŞ Z., Tijsseling A. S.

JOURNAL OF FLUIDS ENGINEERING-TRANSACTIONS OF THE ASME, vol.141, no.8, 2019 (SCI-Expanded)

VI. Rapid Liquid Filling of a Pipe With Venting Entrapped Gas: Analytical and Numerical Solutions Tijsseling A. S., Hou Q., BOZKUŞ Z.

JOURNAL OF PRESSURE VESSEL TECHNOLOGY-TRANSACTIONS OF THE ASME, vol.141, no.4, 2019 (SCI-Expanded)

VII. Numerical and experimental investigation of damping in a dam-break problem with fluid-structure interaction

Demir A., Dincer A. E., Bozkuş Z., Tijsseling A. S.

JOURNAL OF ZHEJIANG UNIVERSITY-SCIENCE A, vol.20, pp.258-271, 2019 (SCI-Expanded)

VIII. Effect of Pier Inclination Angle on Local Scour Depth Around Bridge Pier Groups

BOZKUŞ Z., OZALP M. C., DINCER A. E.

ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.43, no.10, pp.5413-5421, 2018 (SCI-Expanded)

IX. Optimization of Pipe Irrigation Networks

MARIM G., Darama Y., BOZKUŞ Z.

TEKNIK DERGI, vol.29, no.5, pp.8631-8650, 2018 (SCI-Expanded)

X. Prediction of Pressure Variation at an Elbow Subsequent to a Liquid Slug Impact by Using Smoothed Particle Hydrodynamics

DİNÇER A. E., BOZKUŞ Z., TIJSSELING A. S.

JOURNAL OF PRESSURE VESSEL TECHNOLOGY-TRANSACTIONS OF THE ASME, vol.140, no.3, 2018 (SCI-Expanded)

XI. Modeling Liquid Slugs Accelerating in Inclined Conduits

Korzilius S. P., Tijsseling A. S., BOZKUŞ Z., Anthonissen M. J. H., Schilders W. H. A.

JOURNAL OF PRESSURE VESSEL TECHNOLOGY-TRANSACTIONS OF THE ASME, vol.139, no.6, 2017 (SCI-Expanded)

XII. Performance of a pumped discharge line with combined application of protection devices against water hammer

REZAEİ V., Calamak M., BOZKUŞ Z.

KSCE Journal of Civil Engineering, vol.21, no.4, pp.1493-1500, 2017 (SCI-Expanded)

XIII. Investigation of Waterhammer Problems in Wind-Hydro Hybrid Power Plants

DİNÇER A. E., BOZKUŞ Z.

ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.41, no.12, pp.4787-4798, 2016 (SCI-Expanded)

XIV. Improved One-Dimensional Models for Rapid Emptying and Filling of Pipelines

Tijsseling A. S., Hou Q., BOZKUŞ Z., LAANEARU J.

JOURNAL OF PRESSURE VESSEL TECHNOLOGY-TRANSACTIONS OF THE ASME, vol.138, no.3, 2016 (SCI-Expanded)

XV. An Improved One-Dimensional Model for Liquid Slugs Traveling in Pipelines

TIJSSELING A. S., Hou Q., BOZKUŞ Z.

JOURNAL OF PRESSURE VESSEL TECHNOLOGY-TRANSACTIONS OF THE ASME, vol.138, no.1, 2016 (SCI-Expanded)

XVI. Investigation of Waterhammer Problems in Water Wind Hybrid Systems

DİNÇER A. E., BOZKUŞ Z.

Teknik Dergi, vol.26, 2015 (SCI-Expanded)

XVII. Investigation of the Water Hammer Problems in Water-Wind Hybrid Systems

Dincer A. E., BOZKUŞ Z.

TEKNIK DERGI, vol.26, no.3, pp.7183-7189, 2015 (SCI-Expanded)

XVIII. Nehir Tipi Hidroelektrik Santrallerin Bilgisayar Destekli Ön Tasarımı

Alimoğlu E., Bozkuş Z., Yanmaz A. M.

Teknik Dergi, vol.25, pp.6925-6941, 2014 (SCI-Expanded)

XIX. Dynamic Force on an Elbow Caused by a Traveling Liquid Slug

Hou D. Q., TIJSSELING A. S., BOZKUŞ Z.

JOURNAL OF PRESSURE VESSEL TECHNOLOGY-TRANSACTIONS OF THE ASME, vol.136, no.3, 2014 (SCI-Expanded)

### XX. Computer assisted preliminary design of run-of-river plants

Alimoglu E., BOZKUŞ Z., Yanmaz A. M.

Teknik Dergi/Technical Journal of Turkish Chamber of Civil Engineers, vol.25, pp.1847-1864, 2014 (SCI-Expanded)

#### XXI. Comparison of performance of two run-of-river plants during transient conditions

ÇALAMAK M., BOZKUŞ Z.

Journal of Performance of Constructed Facilities, vol.27, no.5, pp.624-632, 2013 (SCI-Expanded)

#### XXII. Protective measures against waterhammer in run-of-river hydropower plants

ÇALAMAK M., BOZKUŞ Z.

Teknik Dergi/Technical Journal of Turkish Chamber of Civil Engineers, vol.23, pp.1623-1636, 2012 (SCI-Expanded)

#### XXIII. Protective measures against waterhammer in run of river hydropower plants Nehir tipi

hidroelektrik santrallerde su darbesine karşi alinabilecek önlemler

ÇALAMAK M., BOZKUŞ Z.

Teknik Dergi/Technical Journal of Turkish Chamber of Civil Engineers, vol.23, no.4, pp.6187-6202, 2012 (SCI-Expanded)

#### XXIV. Virtual Failure Analysis of the Cinarcik Dam

BOZKUŞ Z., Bag F.

TEKNIK DERGI, vol.22, no.4, pp.5675-5688, 2011 (SCI-Expanded)

#### XXV. Çınarcık Barajının Sanal Yıkılma Analizleri

BOZKUŞ Z., FIRAT B.

Teknik Dergi, vol.22, 2011 (SCI-Expanded)

# XXVI. A New Method for Prediction of the Transient Force Generated by a Liquid Slug Impact on an Elbow of an Initially Voided Line

KAYHAN B. A., BOZKUŞ Z.

JOURNAL OF PRESSURE VESSEL TECHNOLOGY-TRANSACTIONS OF THE ASME, vol.133, no.2, 2011 (SCI-Expanded)

#### XXVII. Reduction of scouring depth by using inclined piers

BOZKUS Z., CESME M.

CANADIAN JOURNAL OF CIVIL ENGINEERING, vol.37, no.12, pp.1621-1630, 2010 (SCI-Expanded)

### XXVIII. Waterhammer analyses of the Camlidere-Ivedik Pipeline

Bozkus Z.

TEKNIK DERGI, vol.19, no.2, pp.4409-4422, 2008 (SCI-Expanded)

# XXIX. Energy dissipation by vertically placed screens

Bozkus Z., CAKIR P., GER A. M.

CANADIAN JOURNAL OF CIVIL ENGINEERING, vol.34, no.4, pp.557-564, 2007 (SCI-Expanded)

### XXX. Dam Break Analyses for Disaster Management

BOZKUŞ Z.

Teknik Dergi, vol.15, pp.3335-3350, 2004 (SCI-Expanded)

# XXXI. Dam break analyses for disaster management Afet Yönetimi İçin Baraj Yikilma Analizleri BOZKUŞ Z.

Teknik Dergi/Technical Journal of Turkish Chamber of Civil Engineers, vol.15, no.4, pp.3335-3350, 2004 (SCI-Expanded)

### XXXII. Effects of inclination of bridge piers on scouring depth

Bozkus Z., YILDIZ O.

JOURNAL OF HYDRAULIC ENGINEERING-ASCE, vol.130, no.8, pp.827-832, 2004 (SCI-Expanded)

# XXXIII. Experimental and numerical analysis of transient liquid slug motion in a voided line

Bozkus Z., BARAN Ö. U., GER M.

JOURNAL OF PRESSURE VESSEL TECHNOLOGY-TRANSACTIONS OF THE ASME, vol.126, no.2, pp.241-249, 2004 (SCI-Expanded)

#### XXXIV. Liquid slug motion in a voided line

Bozkus Z., WIGGERT D.

JOURNAL OF FLUIDS AND STRUCTURES, vol.11, no.8, pp.947-963, 1997 (SCI-Expanded)

# Articles Published in Other Journals

I. Pre-Event Failure Analyses of Kestel Dam for Disaster Management

BOZKUŞ Z.

An International Journal for Physical and Engineering Sciences, vol.53, 2003 (Peer-Reviewed Journal)

II. Pre-event dam failure analyses for emergency management Afet Yönetimi için Baraj Yikilma Öncesi Analizleri

BOZKUŞ Z., GÜNER A.

Turkish Journal of Engineering and Environmental Sciences, vol.25, no.6, pp.627-641, 2001 (Scopus)

III. Pre-event dam failure analyses for emergency management

BOZKUŞ Z., Güner A. İ.

Turkish Journal of Engineering and Environmental Sciences, vol.25, pp.627-641, 2001 (Scopus)

IV. Comparison of physical and numerical dam-break simulations

BOZKUŞ Z., KASAP A.

Turkish Journal of Engineering and Environmental Sciences, vol.22, no.5, pp.429-443, 1998 (Scopus)

V. Boş Bir Boru Sisteminde Değişken Akımlı Bir Su Kütlesinin Paketinin Hidrodinamiği BOZKUŞ Z.

Turkish Journal of Engineering and Environmental Sciences, vol.19, 1995 (Scopus)

# **Books & Book Chapters**

I. Simulating Flood Due to Dam Break

Dinçer A. E., Bozkuş Z., Şahin A. N., Demir A., Eslamian S.

in: Flood Handbook, Saeid Eslamian, Faezeh Eslamian, Editor, CRC Press, Taylor&Francis Group, Florida, pp.487-508, 2022

### Refereed Congress / Symposium Publications in Proceedings

I. Investigation of Interaction Between Pressure Relief Valve and Turbines During a Transient Flow in a Hydropower Plant

Çetintaş M. A., BOZKUŞ Z., Çelebioğlu T. K.

the 15th International Congress on Advances in Civil Engineering, Gazimagusa, Cyprus (Kktc), 6 September - 08 August 2023

II. Introduction of a Computer Software (S-Hammer) Developed to Analyze Fluid Transients in Pipelines

TOPRAGHGHALEH S. H., BOZKUŞ Z.

the 15th International Congress on Advances in Civil Engineering, Gazimagusa, Cyprus (Kktc), 6 - 08 September 2023

III. Tilting Manhole Covers

van de Meulenhof N., Tijsseling A. S., Vasconcelos J. G., HOU Q., BOZKUŞ Z.

40th IAHR World Congress, Viyana, Austria, 21 - 25 August 2023

IV. Air gun with water bullet

BOZKUŞ Z., DİNÇER A. E., Tijsseling A. S., van de Ven F.

International conference on Pressure Surges – Eindhoven, The Netherlands; 12th-14th April 2023, Eindhoven, Netherlands, 12 - 14 April 2023

V. Flood Protection Works of Cırnık Bridge in Muratpaşa District, Antalya

Karakuş U. C., BOZKUŞ Z.

ACE 2020-2021 14th International Congress on Advances in Civil Engineering, İstanbul, Turkey, 06 September 2021

#### VI. Investigation of Water Hammer Problems and Potential Solutions in Pump Discharge Lines

Erdem R. Ç., BOZKUŞ Z.

ACE 2020-2021 14th International Congress on Advances in Civil Engineering, İstanbul, Turkey, 06 September 2021

#### VII. Venting Manhole Cover: A Nonlinear Spring-Mass System

Tijsseling A. S., Vasconcelos J. G., HOU Q., BOZKUŞ Z.

ASME 2020 Pressure Vessels and Piping Division Conference PVP2020, 20 - 24 July 2020

#### VIII. Dancing Manhole Cover: A Nonlinear Spring-Mass System

Tijsseling A. S., Vasconcelos J. G., Hou Q., Bozkuş Z.

ASME 2019 Pressure Vessels and Piping Division, Texas, United States Of America, 14 - 19 July 2019

#### IX. Dam Break Analyses of Berdan Dam with 2-D Models

ÜNAL Ç. I., BOZKUŞ Z.

5th Int. Symposium on Dam Safety 2018, 27 - 31 October 2018

## X. Introducing a new computer code, H-Hammer, to solve fluid transients in pipe flow

Dalgıç H., Bozkuş Z.

the 13th International Congress on Advances in Civil Engineering, 12 - 14 September 2018

### XI. Experimental Investigation of a Slug Motion in an Inclined Pipe System

Dinçer A. E., Bozkuş Z.

the 13th International Congress on Advances in Civil Engineering, İzmir, Turkey, 12 - 14 September 2018

# XII. Moving liquid column with entrapped gas pocket and fluid-structure interaction at a pipe's dead end: A nonlinear spring-mass system

Tijsseling A. S., Hou Q., Bozkuş Z.

ASME 2018 Pressure Vessels and Piping Conference, PVP 2018, Prague, Czech Republic, 15 - 20 July 2018, vol.4

# XIII. Analytical Solutions for Liquid Slugs and Pigs Traveling in Pipelines with Entrapped Gas

TİJSSELİNG A. S., QİNGZHİ H., BOZKUŞ Z.

ASME 2017 Pressure Vessels and Piping Division Conference PVP2017, 16 - 20 July 2017

# XIV. Performance Analysis of a Single Smoothed Particle Hydrodynamics Code

DİNÇER A. E., BOZKUŞ Z.

ICOCEE 2017, 8 - 10 May 2017

# XV. Dam Break analysis using 1D HEC RAS Model

ASHRAF A., BOZKUŞ Z.

the 12th International Congress on Advances in Civil Engineering, Boğaziçi University, Istanbul, 21 - 23 September 2016

# XVI. Simulation of Slug Flow in a Horizontal Pipe

DİNÇER A. E., BOZKUŞ Z.

12th International Congress on Advances in Civil Engineering, Boğaziçi University, Istanbul, 21 - 23 September 2016

# XVII. Effect of Downstream Channel Slope on Numerical Modeling of Dam Break Induced Flows

DİNÇER A. E., BOZKUŞ Z., ŞAHİN A. N.

4th IAHR Europe Congress, 27 - 29 July 2016, pp.32-37

# XVIII. ANALYTICAL AND NUMERICAL SOLUTION FOR A RIGID LIQUID-COLUMN MOVING IN A PIPE WITH FLUCTUATING RESERVOIR-HEAD AND VENTING ENTRAPPED-GAS

Tijsseling A. S., Hou Q., BOZKUŞ Z.

ASME Pressure Vessels and Piping Conference, Vancouver, Canada, 17 - 21 July 2016

# XIX. Analytical and Numerical Solution for a Rigid Liquid Column Moving in a Pipe with Fluctuating Reservoir Head and Venting Entrapped Gas

TİJSSELİNG A. S., HOU Q., BOZKUŞ Z.

ASME 2016 Pressure Vessels and Piping Division Conference PVP2016, Vancouver, British Columbia, Canada, 17 - 21 July 2016

# XX. Effect of Pressure Relief Valves on the Fluid Transients in the Penstocks of a Small Run of River Plant

SAMET D., BOZKUŞ Z., DİNÇER A. E.

12th International Conference on Pressure Surges, Fluid Transients and Water Hammer, Dublin, Ireland, 18 - 20 November 2015

XXI. Analytical Expressions for Liquid Slug Velocities in Pipelines with Entrapped Gas

Arris S T., Q Hou D., BOZKUŞ Z.

ASME 2015 Pressure Vessels & Piping Conference PVP2015, Boston, United States Of America, 19 - 23 July 2015

XXII. Comparison of Performance of Labyrinth and Piano Key Weirs in Increasing the Spillway Capacity of Dams

DENIZ K., BOZKUŞ Z.

International Conference on Civil and Environmental Engineerin, Nevşehir, Turkey, 20 - 23 May 2015

XXIII. ANALYTICAL EXPRESSIONS FOR LIQUID-COLUMN VELOCITIES IN PIPELINES WITH ENTRAPPED GAS Tijsseling A. S., Hou Q., BOZKUŞ Z.

ASME Pressure Vessels and Piping Conference, PVP-2015, Massachusetts, United States Of America, 19 - 23 July 2015

XXIV. Numerical Investigation of Protection Measures against Water Hammer in the Yeşilvadi Hydropower Plan

DURSUN S., BOZKUŞ Z.

the 11th International Congress on Advances in Civil Engineering, İstanbul, Turkey, 21 - 25 October 2014

XXV. Investigation of Water Hammer Problems in the Penstocks of Pumped-Storage Power Plants DİNÇER A. E., BOZKUŞ Z.

11th International Congress on Advances in Civil Engineering, İstanbul, Turkey, 21 - 25 October 2014

XXVI. AN IMPROVED 1D MODEL FOR LIQUID SLUGS TRAVELLING IN PIPELINES

Tijsseling A. S., Hou Q., BOZKUŞ Z.

ASME 2014 Pressure Vessels and Piping Conference (PVP-2014), California, United States Of America, 20 - 24 July 2014

XXVII. Numerical investigation of operation levels in a surge tank of a small hydropower plant ÇALAMAK M., BOZKUŞ Z.

10th International Congress on Advances in Civil Engineering (ACE 2010), Ankara, Turkey, 17 - 19 October 2012, pp.1-8

XXVIII. Experimental Investigation of Local Scour Around Bridge Pier Groups

ÖZALP M. C., BOZKUŞ Z.

the 21st Canadian Hydrotechnical Conference, Banff, Alberta, Canada, 14 - 17 May 2013

XXIX. Numerical Investigation of Operation Levels in a Surge Tank of a Small Hydropower Plant ÇALAMAK M., BOZKUŞ Z.

the 10th International Congress on Advances in Civil Engineering, Ankara, Turkey, 17 - 19 October 2012

XXX. Investigation of Waterhammer in Çamlıdere Dam-Ivedik Water Treatment Plant Pipelines SAKABAŞ E., BOZKUŞ Z.

the 10th International Congress on Advances in Civil Engineering, Ankara, Turkey, 17 - 19 October 2012

XXXI. Tailwater Effect on the Energy Dissipation through Screens

BOZKUŞ Z., ASLANKARA V.

8th International Congress on Advances in Civil Engineering, 15 - 17 September 2008

XXXII. Local Scour Around Inclined Bridge Piers

BOZKUŞ Z., Çeşme M.

the 18th Canadian Hydrotechnical Conference, Winnipeg, Canada, 22 - 24 August 2007

XXXIII. Energy Dissipation by Triangular Screens

BOZKUŞ Z., GÜNGÖR E., GER A. M.

Seventh International Congress on Advances in Civil Engineering, 11 - 13 October 2006

XXXIV. Effect of Inclination of Screens on Energy Dissipation Downstream of Small Hydraulic Structures BOZKUŞ Z., Balkış G., GER A. M.

the 17th Canadian Hydrotechnical Conference, Edmonton, Alberta, Canada, 17 - 19 August 2005

XXXV. Scouring Tests on the Physical Model of Yamula Dam and Hydropower Plant

BOZKUŞ Z., GÖĞÜŞ M.

the Sixth International Congress on Advances in Civil Engineering, İstanbul, Turkey, 6 - 08 October 2004

#### XXXVI. Energy Dissipation Through Screens

BOZKUŞ Z., CAKIR P., GER A. M., ÖZEREN Y.

ASCE, World Water Environmental Resources Conference, Salt Lake City, United States Of America, 27 June - 01 July 2004

#### XXXVII. Pre-Event Failure Analyses of Kestel Dam for Disaster Management

BOZKUŞ Z.

the Fifth International Congress on Advances in Civil Engineering, İstanbul, Turkey, 25 - 27 September 2002

### XXXVIII. Experimental Investigation of Scouring Around Inclined Bridge Piers

BOZKUŞ Z., YILDIZ O.

ASCE, Wetlands Engineering River Restoration Conference, Reno-Nevada, United States Of America, 27 - 31 August 2001

### XXXIX. Hydromechanics of Slug Motion in a Voided Line

BOZKUŞ Z., Wiggert D. C.

the International Conference on Unsteady Flow and Fluid Transients, Durham, Canada, 29 September - 01 October 1992

# **Supported Projects**

BOZKUŞ Z., UYANIK M. C., HABIBI TOPRAGHGHALEH S., Project Supported by Higher Education Institutions, Zamana Bağlı Değişen Akımın Yer Aldığı Basınçlı Boru Sistemlerinde Çeşitli Sınır Koşullarında Oluşan Problemlerin Çözümü İçin Yerli Yazılım Geliştirilmesi, 2021 - 2023

BOZKUŞ Z., DİNÇER A. E., Project Supported by Higher Education Institutions, Boş bir boru hattında aniden basınç altında harekete geçen bir sıvı kütlesinin boru elemanları üzerinde yarattığı pik basınçların deneysel olarak araştırılması, 2017 - 2017

BOZKUŞ Z., Project Supported by Other Private Institutions, Incir Dam and Hydroelectric Power Plant Bottom Outlet and Dissipation Chamber Hydraulic Model Studies, 2013 - 2014

# Scientific Refereeing

OCEAN ENGINEERING, SCI Journal, October 2023

OCEAN ENGINEERING, SCI Journal, September 2023

Project Supported by Higher Education Institutions, BAP Research Project, Hacettepe University, Turkey, May 2023 TEKNIK DERGI/TECHNICAL JOURNAL OF TURKISH CHAMBER OF CIVIL ENGINEERS, Journal Indexed in SCI-E, December 2021

Project Supported by Higher Education Institutions, BAP Research Project, Middle East Technical University, Turkey, August 2021

Technopark, Middle East Technical University, Turkey, July 2021

TEKNIK DERGI/TECHNICAL JOURNAL OF TURKISH CHAMBER OF CIVIL ENGINEERS, Journal Indexed in SCI-E, September 2020

TEKNIK DERGI/TECHNICAL JOURNAL OF TURKISH CHAMBER OF CIVIL ENGINEERS, Journal Indexed in SCI-E, June 2020 TEKNIK DERGI/TECHNICAL JOURNAL OF TURKISH CHAMBER OF CIVIL ENGINEERS, Journal Indexed in SCI-E, March 2020

TEKNIK DERGI/TECHNICAL JOURNAL OF TURKISH CHAMBER OF CIVIL ENGINEERS, Journal Indexed in SCI-E, February 2020

TEKNIK DERGI/TECHNICAL JOURNAL OF TURKISH CHAMBER OF CIVIL ENGINEERS, Journal Indexed in SCI-E, July 2019 TEKNIK DERGI/TECHNICAL JOURNAL OF TURKISH CHAMBER OF CIVIL ENGINEERS, Journal Indexed in SCI-E, February 2019

MARINE GEORESOURCES & GEOTECHNOLOGY, SCI Journal, December 2018
Asia-Pacific Journal Of Chemical Engineering, Journal Indexed in SCI-E, November 2018
TEKNIK DERGI, Journal Indexed in SCI-E, October 2018

### **Tasks In Event Organizations**

Oğuz E., Köken M., Aydın I., Bozkuş Z., Akyürek S. Z., Kentel Erdoğan E., Yılmaz M. T., Yücel I., Özyurt Tarakcioğlu G., 14th International Conference on Hydroscience and Engineering (ICHE2022), Bilim Kurulu Üyesi, Scientific Congress, İzmir, Turkey, Mayıs 2022

#### **Metrics**

Publication: 79
Citation (WoS): 321
Citation (Scopus): 371
H-Index (WoS): 13
H-Index (Scopus): 12

# **Congress and Symposium Activities**

The Third International Workshop on Unsteady Two-Phase Flow and Its Engineering Applications, Invited Speaker, Tianjin, China, 2024

14th International Congress on Advances in Civil Engineering, Attendee, İstanbul, Turkey, 2021

14th International Congress on Advances in Civil Engineering, Attendee, İstanbul, Turkey, 2021

Experimental Investigation of a Slug Motion in an Inclined Pipe System, Working Group, İzmir, Turkey, 2018

Introducing a new computer code, H-Hammer, to solve fluid transients in pipe flow, Working Group, İzmir, Turkey, 2018

#### **Invited Talks**

The Third International Workshop on Unsteady Two-Phase Flow and Its Engineering Applications, Workshop, Tianjin University, China, April 2024

#### **Scholarships**

Scholarship for English, Master and PhD Studies in USA., Ministry of Education, 1983 - 1991

#### **Awards**

Bozkuş Z., ODTÜ Geliştirme Vakfı Bilimsel Makale Ödülü, Odtü Geliştirme Vakfı, August 2022

Bozkuş Z., Prof.Dr. Mustafa N. Parlar Eğitim ve Araştırma Vakfı, 2015-2016 Akademik Yılı, ODTÜ Yılın Eğitimcisi Ödülü,

Prof.Dr. Mustafa Parlar Vakfı-Odtü İşbirliği, December 2016

Bozkuş Z., Prof.Dr. Mustafa N. Parlar Foundation. Middle East Technical University-Educator of the Year Award, Prof.Dr.

Mustafa Parlar Vakfı-Odtü İşbirliği, December 2011

Bozkuş Z., Akademik Performans Ödülü, Orta Doğu Teknik Üniversitesi, July 2005

Bozkuş Z., Outstanding Academic Achievement Award, Michigan State University, May 1989

Bozkuş Z., First Place in Graduating Class of 1981-1982 Academic Year, İstanbul Teknik Üniversitesi-İnşaat Fakültesi,

# Non Academic Experience

Orta Doğu Teknik Üniversitesi Company, Tubin İnşaat A.Ş., Teknik Konular Tubin İnşaat A.Ş. Orta Doğu Teknik Üniversitesi Devlet Su İşleri